Remarks

Claims 2, 12, 16 and 17 are canceled.

Claims 1, 3 and 4 are amended.

Claim 26 is added.

Claims 1, 3-11, 13-15 and 18-26 are present in this application upon entry of this amendment.

The claims are amended to limit the sterically hindered alkoxyamine stabilizers to methoxy, propoxy and cyclohexyloxy alkoxyamines.

Support is found in the specification, page 28 under the definitions of alkyl, cycloalkyl, alkoxy and cycloalkoxy. Support is also found in original claim 3, under definition of "R", page 81 of original application.

Claims 3 and 4 are amended to be consistent with claim 1.

Claim 1 is also amended to incorporate the limitations of original claims 12 and 17, where components (i) and (ii) are in certain weight ratios and where the total component (b) is present at certain weight levels.

New claim 26 finds support for the 1:14 weight ratio from working Examples 1 and 2 on page 56. The upper 1:50 weight ratio finds support in original claim 15.

The specification is amended to correct the first paragraph.

No new matter is added.

Claims 1-25 are rejected under 35 USC 103(a) as being unpatentable over Haley, et al., U.S. Pat. No. 5,393,812 in view of any secondary reference to Galbo, et al., U.S. Pat. Nos. 5,216,156, 6,271,377, 5,300,544 or 5,844,026; Behrens, et al., U.S. Pat. Nos. 5,124378 or 5,112,890; or Zedda, et al., U.S. Pat. No. 5,204,473.

Applicants respectfully traverse these rejections.

Haley teaches the co-use of hindered alkoxyamine stabilizers and tris(halohydrocarbyl) phosphate or phosphonate ester flame retardants in polyolefin. Haley discloses a range of use of the halogenated hydrocarbyl phosphate ester from 0.5% and 15% (col. 12 .ines 13-26). Also disclosed is a range of use of the hindered alkoxyamine from 0.01% to 3%. The closest working Examples of Haley to the present weight ratios of components are Examples 1 and 6, where there is a 1:5 and a 1:10 weight ratio of hindered alkoxyamine to organohalogen flame retardant respectively. Examples 2 and 5 teach a 3:2 weight ratio of hindered alkoxyamine to organohalogen flame retardant.

The one specific hindered alkoxyamine taught by Haley is TINUVIN 123, bis-(1-octyloxy-2,2,6,6-tetramethylpiperidin-4-yl) sebacate.

The present claims are focused on where the hindered alkoxyamine is methoxy, propoxy or cyclohexyloxy substituted hindered amine. The weight ratio of hindered amine to organohalogen flame retardant is from about 1:5 to about 1:200. The total weight of both components in the thermoplastic resin is from about 8% to about 17% by weight based on the resin.

Surprisingly, the claimed limitations provide polymer compositions that meet the stringent V0 rating according to the UL-94 flammability test. A Declaration under Rule 132 by Dr. Nikolas Kaprinidis is attached herewith. The Kaprinidis Declaration shows that formulations of the present invention containing a hindered cycloalkoxy, methoxy or propoxy alkoxyamine moiety together with an organohalogen flame retardant surprisingly perform better than the same formulation containing TINUVIN 123.

These results are surprising and could not be arrived at from the Haley disclosure. As the present claims are aimed at formulations that provide a V0 UL-94 rating, two ratings better than that achievable with a formulation as taught by Haley, Applicants submit that this is an important teaching to the public that cannot be arrived at from Haley, or from Haley in combination with the any secondary references.

Applicants submit that in light of the Kaprinidis Declaration and the above discussion, that the present rejections are addressed and are overcome.

The Examiner is kindly requested to reconsider and to withdraw the present rejections.

Information Disclosure Statement

Listed on form PTO 1449 are the non-U.S. patent references previously listed, but without a month and year. These references are now properly listed.

Also submitted for consideration are the following:

U.S. Pat. No. 6,472,456
U.S. Pat. No. 6,599,963
U.S. Pat. No. 6,800,678

These three U.S. references are of the same family as WO 99/00450, of record.

Further:

U.S. Pat. No. 6,881,773
U.S. published app. No. US-2005-0004294-A1
U.S. published app. No. US-2003-0207969-A1
U.S. published app. No. US-2004-0097620-A1

A fee letter is attached for the IDS.

The Examiner is respectfully requested to indicate that each reference is considered by returning an intitialed copy of form 1449.

Respectfully submitted,

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Attachment: Declaration under Rule 132 (Kaprinidis)
PTO form 1449
Petition for 1 month extension of time
fee letter for IDS